

## ABSTRACT

### **Profile of Hemodialysis Patients' Complications based on Their Vascular Access in Dr. Soetomo Hospital February-April 2016.**

Anthomina Maya Rantesalu<sup>1</sup>, Aditiawardana<sup>2</sup>, Pirlina Umiastuti<sup>3</sup>

**Introduction:** The choices of vascular access are different in different places. RSUD Dr. Soetomo uses direct canulation/ *pungsi langsung* (PL), central venous catheter (CVC), and arteriovenous fistula (AVF). Vascular access' complications can cause a delay and a failure of hemodialysis. Moreover, there is no sufficient research regarding vascular access complications among hemodialysis patients in Indonesia.

**Methods:** A cross-sectional study was performed on 190 hemodialysis patients in Dr. Soetomo hospital during 1 February to 30 April 2016. Data were collected by observation using a checklist designed to assess the complications based on patients' vascular access. Patients with hepatitis B and or C are excluded. This study was designed to identify the percentage of hemodialysis patients' complications based on their vascular access

**Result:** 130 patients used AVF, 31 patients used CVC, and 29 used PL. Complications founded in AVF and PL in sequentially were infections (2,3%; 6,9%), hematoma (3,1%; 10,3%), pseudoaneurysm (50,8%; 31,0%) and paresthesia (3,1%; 3,4%). Patients used CVC had inadequate circulation (19,4%), exit-site catheter infection (6,5%), spontaneous catheter exit (6,5%), and fever and chill (25,8%).

**Conclusion:** AVF was still the first choice for vascular access. PL as temporary access had been used as long term access. The high number of complications can be determined by vascular access type and lack of maintenance of vascular access site. Data provided in this study can be applied toward improving patient care.

**Keywords :** *Vascular access, vascular access complication, hemodialysis, profile, arteriovenous fistula, central venous catheter*

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<sup>1</sup> Medical Student of Airlangga University, Surabaya, Indonesia

<sup>2</sup> Departement of Internal Medicine of RSUD Dr. Soetomo, Surabaya, Indonesia

<sup>3</sup> Departement of Public Health of Airlangga University, Surabaya, Indonesia